

RIO GRANDE DIVERSION INFRASTRUCTURE INVENTORY

Structure Name: RIO GRANDE D 4

Reported By: Daniel Boyes

Date: April 9, 2019

Headgate	Latitude	Longitude
Location:	37.6843	-106.3505

Headgate Type: Manually operated 2' wide cast iron slide gate

Headgate Condition:	A <input type="checkbox"/>	Diversion and Other Condition:	A <input type="checkbox"/>	River Miles from New Mexico State Line (Point of Diversion):	Structure Submerged: Yes <input type="checkbox"/>
	B <input type="checkbox"/>		B <input checked="" type="checkbox"/>		No <input checked="" type="checkbox"/>
	C <input checked="" type="checkbox"/>		C <input type="checkbox"/>	101.02 mi	
	D <input type="checkbox"/>		D <input type="checkbox"/>		
	F <input type="checkbox"/>		F <input type="checkbox"/>		

Repair(s) or Improvement(s) Completed Since 2006: None

Structure Description: There is a long feeder channel, with the point of diversion located on the south bank of the Rio Grande. The feeder channel travels past the Woods & River RV Park, past the Del Norte Town Park, and under State Hwy 112, before it reaches the headgate. A small vertical corrugated metal pipe with check boards and a concrete headwall, located just upstream of the headgate, directs unused water into the return flow channel back to the river. The headgate leaks slightly. Water entering the headgate is carried in a corrugated metal pipe underneath the adjacent property to the east, where it becomes a 12 ft plastic corrugated pipe. The plastic pipe travels under the Rio Grande and irrigates the island formed by the North and South Channels of the Rio Grande. Just downstream of the flume, the ditch goes into a siphon and is carried under the Rio Grande. The diversion dam, which is upstream of the Hwy 112 bridge, functions well except at low flows, when the ditch has difficulty accessing water. During 2019 spring runoff, significant sediment and woody debris became lodged at the diversion dam entrance, including a large cottonwood.

Repair(s) or Improvement(s) Currently Needed: Given the issues facing this structure, the SMP Technical Advisory Team (TAT) recommends headgate repair, minor improvements to the diversion for effective low flow diversion, and the installation of a trash rack to prevent woody debris from entering the feeder channel. Continual maintenance and feeder ditch clearing will be necessary if a trash rack or other debris mitigation system is not employed.

Comments: This ditch is a priority 13.

Notes:

Estimated Range of Cost: Low

Headgate looking downstream



Aerial view of diversion dam looking downstream



Diversion dam looking downstream



Diversion dam (post-2019 runoff)



Ditch carrier made of corrugated plastic pipe



Flume looking upstream

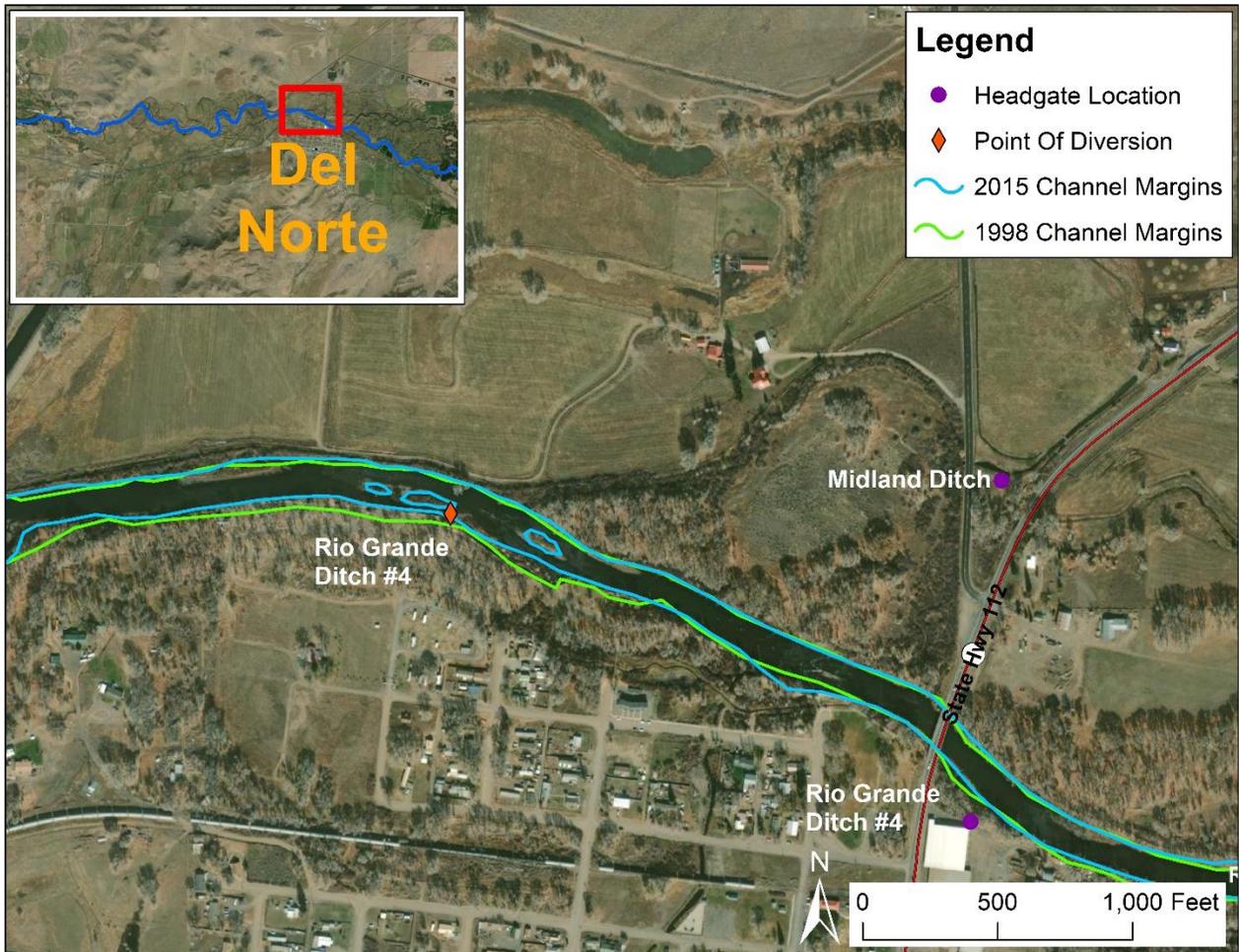


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PHOTO LOG

Rio Grande Stream
Management Plan



Map showing location of Rio Grande D 4 point of diversion and headgate with 1975 and 2015 channel margins overlaid.



Rio Grande D 4 diversion dam looking upstream.



Point of diversion, post-2019 runoff. This cottonwood is currently blocking the feeder channel.